

April 2, 2025

University of North Texas Center for Human Identification (UNTCHI) Resources



Image provided by CHI

Mark Pooley, Director of Investigative Support
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Disclaimer

This project was supported by Grant No. 15PBJA-22-GK-01556-JAGT awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the U.S. Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

Agenda

- Missing and Unidentified Human Remains (MUHR) Program Case Submission
 - *Mark Pooley*
- Forensic Genetic Genealogy (FGG) Services
 - *Dixie Peters*
- Sexual Assault Kit Initiative (SAKI) Resources for UHRs from Sexually-Motivated Homicides
 - *Robert Moore*



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UNTCHI's MUHR Purpose Area 3 Award – Resources for Missing and Unidentified Indigenous Persons Investigations

Mark Pooley
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What does the MUHR Program do for Missing and Unidentified Indigenous Person Investigations?

- Provides DNA testing for Unidentified Human Remains (UHR) samples
- Provides DNA testing for Family Reference Samples (FRS) collected from family members of the missing person
- The obtained DNA samples will be entered into the Combined DNA Index System (CODIS)
- Provides Mitochondrial, Short Tandem Repeat (STR), and Y-STR DNA testing

CHI Works With Several Partners Nationwide

- Tribal Law Enforcement
- Municipal (City) Law Enforcement
- State Agencies (e.g., Medical Examiners)
- Federal Partners

The MUHR Award allows free DNA testing for these partners who are investigating Missing and Unidentified Indigenous Person cases.

Utilizing MUHR Resources at CHI

1. Identify unresolved missing or unidentified person cases where the victim is American Indian/Alaska Native in your jurisdiction
2. Find out if the missing or unidentified person has been entered into CODIS
3. If they have not been entered into CODIS or need supplemental DNA testing (Mitochondrial, Y-STR), reach out to CHI to discuss eligibility

MUHR Point of Contact

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Forensic Genetic Genealogy (FGG) Services

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What does the MUHR Program do for Missing and Unidentified Indigenous Person Investigations?

- Provides DNA testing for UHR samples
- Provides DNA testing for FRS collected from family members of the missing person
- The obtained DNA samples will be entered into CODIS
- Provides FGG testing for UHR samples

After CODIS

- If searches within CODIS do not lead to an identification, additional testing may be performed
- FGG uses Single Nucleotide Polymorphisms (SNPs) which are compatible with Direct-to-Consumer (DTC) genealogical databases
- Some of these databases allow law enforcement (LE) searches
- Only cases classified as "homicide" or "suspected" homicide are eligible for FGG services

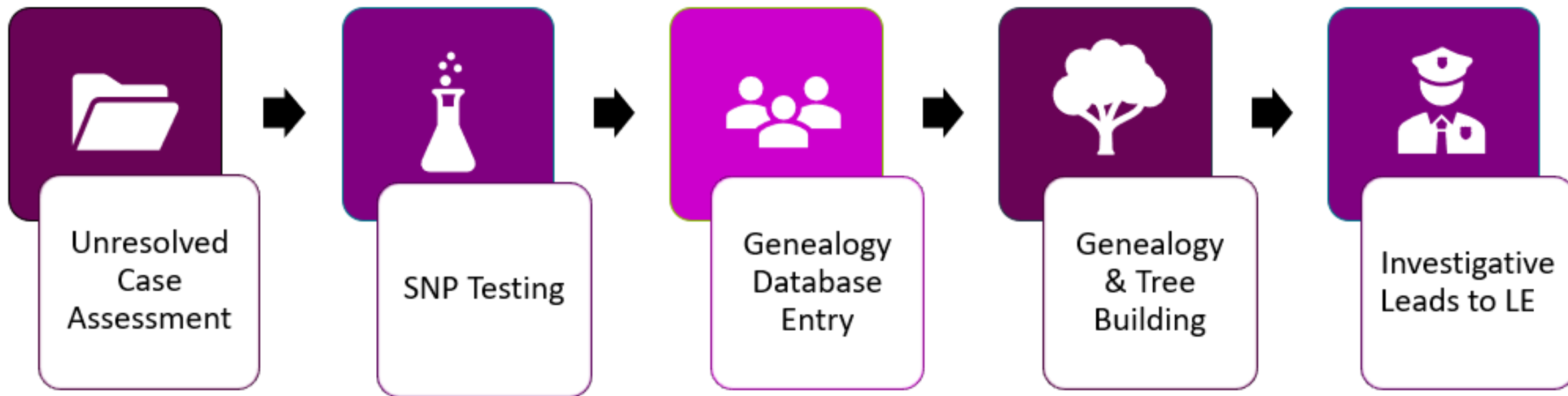


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CHI offers multiple SNP methodologies



TARGETED

**Qiagen's
ForenSeq®
Kintelligence Kit
10,230 SNPs**



MICROARRAY

**Illumina Infinium
Assay (Global
Screening Array)
650,000 SNPs**



WHOLE GENOME

**Illumina DNA Prep &
NovaSeq 6000
3 billion data points**

Image provided by CHI

DNA Extract Requirements

- STR DNA profile obtained first
 - Testing may have been performed at another accredited forensic laboratory
- Negative CODIS searches
- DNA extract available including an extraction blank
- If the volume and DNA concentration meets the SNP methodology requirements, testing may proceed
- United States Department of Justice Interim Policy Forensic Genetic Genealogical DNA Analysis and Searching is followed

Multiple DTC Genealogical Databases Allow LE Searches

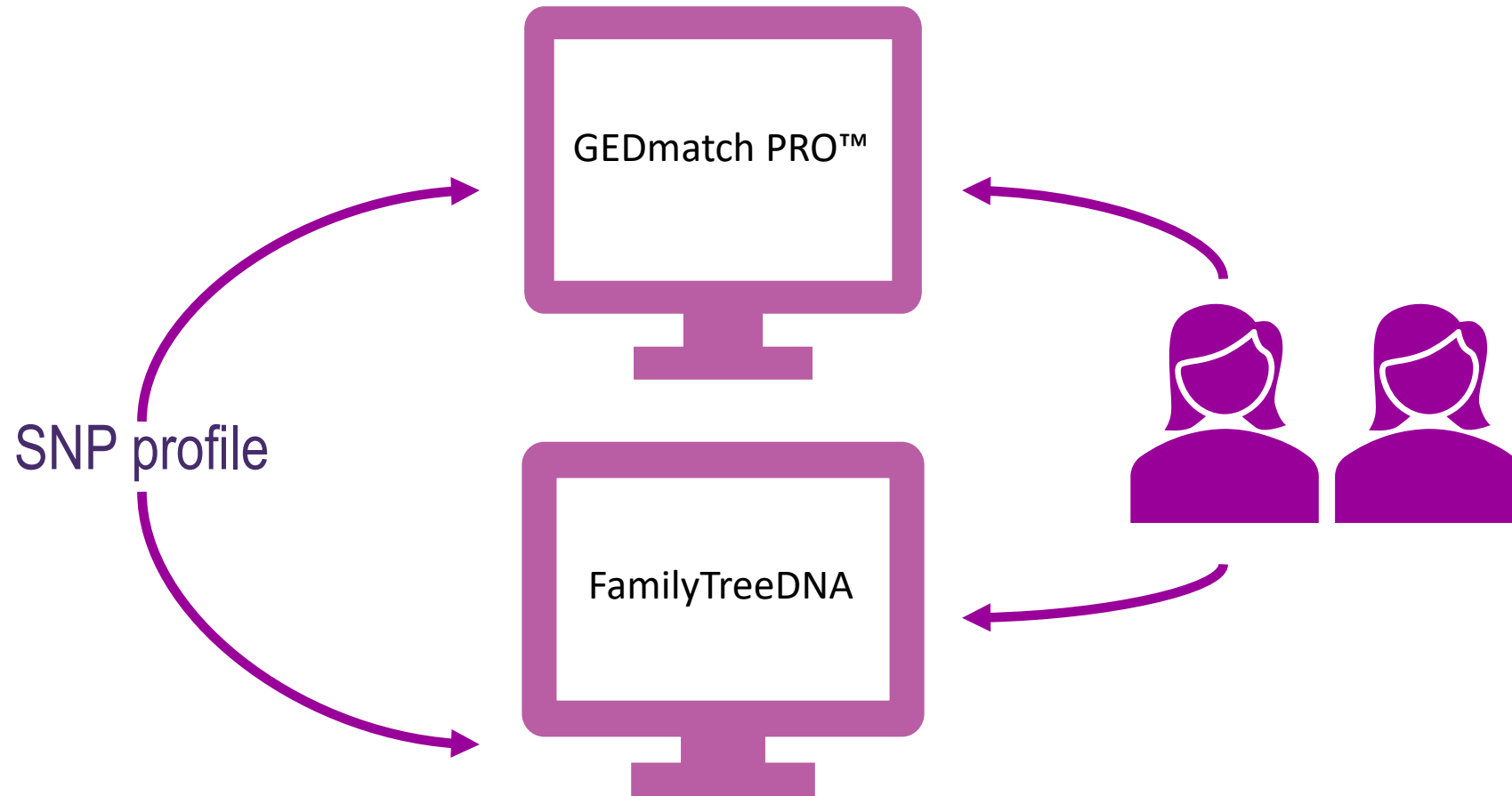


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Sexual Assault Kit Initiative (SAKI) Training and Technical Assistance (TTA) Purpose Area 2 Resources for UHRs from Sexually-Motivated Homicides

Robert Moore

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This project was supported by Grant No. 15PBJA-23-GK-02257-SAKI awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the U.S. Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

What is “Sexually-Motivated”?

- Victim found totally or partially nude
- Victim’s genitalia exposed
- Victim found sexually posed
- An object has been inserted into a body cavity
- Evidence of some form of sexual contact
- Evidence of sexual activity or sadistic sexual fantasy at the scene

If you can reasonably articulate that at least one of these circumstances exists, this case may be eligible for resources under CHI's SAKI TTA PA 2 award.

What Does the SAKI TTA Purpose Area 2 Grant Do?

- Provides DNA testing for UHR samples for Jane/John Doe homicide victims where a sexual nexus exists
- Provides DNA testing for FRS collected from potential family members of the victim
- Provides entry of obtained DNA samples into CODIS
- Allows for the development of a SNP profile for FGG if no associations are made through CODIS

SAKI TTA Purpose Area 2 Point of Contact

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Questions?

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